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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,756	01/19/2005	Roger Arese	034296-012	4181
21839 RUCHANAN	7590 06/04/2001 INGERSOLL & ROOM	EXAMINER		
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404			MCNALLY, DANIEL	
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			1733	
			MAIL DATE	DELIVERY MODE
			06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/521,756	ARESE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Daniel McNally	1733				
The MAILING DATE of this communication app	-	ł .				
Period for Reply		•				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tin ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 01 Se	Responsive to communication(s) filed on 01 September 2005.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-33</u> is/are pending in the application.						
, , ,	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) <u>28-30</u> is/are allowed.						
· <u> </u>	6)⊠ Claim(s) <u>1-17 and 20-22, 24-27 and 31-33</u> is/are rejected.					
7)⊠ Claim(s) <u>1,18,19 and 23</u> is/are objected to.	<u> </u>					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	•					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No.						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date <u>1/19/2005</u> , <u>4/5/2005</u> . 6) Other:						

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DETAILED ACTION

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Claim Objections

1. Claims 1 and 19 objected to because of the following informalities: The applicant amended the claims to remove reference numerals, however it appears several numerals were overlooked. Claim 1, line 5 includes the numeral "(1)." Claim 19, line 3 includes the numerals "(405, 406)." It is recommended removing the reference numerals recited above. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 5, 6, 15, 16, 24, 25, 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 2, recites "a step of acceleration of the lath." Page 11, lines 32-36, discloses accelerating the lath when the lath has a length greater than the dimension of the facing material. The lath of Claim 5, as disclosed in Claim 1 may have a length less than, approximately equal to or greater then the width of the facing material. The lath of Claim 5 is therefore not limited to a length greater then the dimension of the facing material. It is unclear how a lath of a length equal to or less than the width of the facing material can be accelerated. It is recommended amending Claim 5 to positively recite that the lath is limited to a length greater then the width of the facing sheet.

Claim 6, line 2, recites "accompanying the lath." Page 11, lines 32-36, discloses accompanying the lath when the lath has a length greater than the dimension of the facing material. The lath of Claim 6, as disclosed in Claim 1 may have a length less than, approximately equal to or greater then the width of the facing material. The lath of Claim 6 is therefore not limited to a length greater then the dimension of the facing material. It is unclear how a lath of a length equal to or less than the width of the facing material can be accompanied. It is recommended amending Claim 6 to positively recite that the lath is limited to a length greater then the width of the facing sheet.

Claim 15, line 2-3 recites "the means," it is unclear what "the means" is referring to. It appears "the means" is referring to "the means for introducing...a lath" of Claim 14. It is recommended amending "the means" to recite —the means for introducing the lath--.

Claim 16, line 2-3 recites "the means," it is unclear what "the means" is referring to. It appears "the means" is referring to "the means for introducing...a lath" of Claim 14. It is recommended amending "the means" to recite –the means for introducing the lath--.

Claim 24, line 2 recites "the means," it is unclear what "the means" is referring to, because there is multiple "means for" in Claim 23. It appears "the means" is referring to "means for accelerating the lath" of Claim 23. It is recommended amending "the means" to recite –the means for accelerating the lath--.

Claim 25, line 2 recites "the means," it is unclear what "the means" is referring to, because there is multiple "means for" in Claim 23. It appears "the means" is referring to "means for supporting the lath" of Claim 23. It is recommended amending "the means" to recite —the means for supporting the lath—.

Claim 31, line 2 recites "the means," it is unclear what "the means" is referring to, because there is multiple "means for" in Claim 30. It appears "the means" is referring to "means for accelerating the lath" of Claim 30. It is recommended amending "the means" to recite –the means for accelerating the lath--.

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Claim 32, line 2 recites "the means," it is unclear what "the means" is referring to, because there is multiple "means for" in Claim 30. It appears "the means" is referring to "means for supporting the lath" of Claim 30. It is recommended amending "the means" to recite –the means for supporting the lath--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims1, 3, 7-14, 16, 20-22, 26, 27 and 33 rejected under 35 U.S.C. 102(a) as being anticipated by Barcaro [WO03/041930A1].

Barcaro discloses a method of making boards based on hydraulic binders, said boards having beveled or thinned edges (translated abstract). As shown in Figure 1, a composition of hydraulic binder (2) is provided on a facing material (1), the passing of the materials under a die (4,403) provides a perform (5), the perform sets as it moves in the direction (A). As shown in Figure 2, the set perform is cut. Figures 1,6 and 10 show providing a lath (6) from a magazine (20), where the lath is at least greater than the

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width of the facing material, introducing the lath underneath the facing material. Barcaro also discloses removing the lath before cutting the set perform into boards (translated abstract) and cutting at the narrowed section (8) as shown in Figure 2.

With regard to claim 3, Figure 1 shows introducing the lath downstream from where the hydraulic binder is introduced to the facing material.

With regard to claim 7, Barcaro discloses removing the lath before the cutting step (translated abstract).

With regard to claim 8, Figure 2 shows cutting the board in the center of the narrowed section.

With regard to claims 9 and 33, Barcaro discloses the desired lath thickness in claim 4 of the reference.

With regard to claim 10, Barcaro discloses the desired lath width in claim 5 of the reference.

With regard to claim 11, Barcaro discloses the two lateral strips in claim 6 of the reference.

With regard to claim 12, Figure 1 shows applying a facing material (3) before passing the material into the die.

With regard to claim 13, Barcaro disclose the hydraulic binder as a plaster (translated abstract).

Barcaro discloses a production line comprising a die, a means for introducing a lath under a facing material as shown in Figure 1.

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With regard to claim 16, Figure 1 shows introducing the lath downstream from where the hydraulic binder is introduced to the facing material.

With regard to claim 20, Figure 6 shows a lath magazine, a lath, means for extracting the lath, means for receiving the lath, means for displacing the lath, means for supporting the lath and a means for sliding the lath under the facing material.

With regard to claim 21, Figure 6 shows the structural limitations of the means for receiving the lath.

With regard to claim 22, Figure 6 shows the structural limitations of the rim and means for supporting the lath.

With regard to claim 26, Figure 1 shows the means for covering the hydraulic binder with a second facing material.

With regard to claim 27, Barcaro discloses the hydraulic binder as plaster (translated abstract).

- 6. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.
- 7. Claims 1, 2, 7, 8, 12-15, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Page [US2168803].

Page discloses a method of manufacturing wallboard with beveled edges. As shown in Figure 1, Page discloses providing a bottom cover sheet (11), pouring a plastic mass (12) or gypsum plaster onto the bottom cover sheet (column 2, lines 23-38), passing the material through forming rolls (16, 17) or "die" to shape the board

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(column 2, lines 39-54), the board sets while passing over the setting conveyor (19), cutting knives (27) cut the board in the recessed portion of the board. Page also discloses providing support members (21) or "lath" underneath the bottom cover sheet (column 3, lines 5-17). It is inherent the lath is at least as long as the width of the bottom cover sheet so that the recessed section is formed entirely across the board. Page discloses removing the support members using a stripping device (24) (column 3, lines 41-53).

With regard to claim 2, Figure 1 shows the support member introduced under the bottom cover sheet upstream from the pouring zone.

With regard to claim 7, Figure 1 shows removing the support member before the cutting process.

With regard to claim 8, Figure 1 shows cutting with cutting knives at the center of the recessed portion of the board.

With regard to claim 12, Page discloses applying a top cover sheet (18) to the plastic mass as shown in Figure 1.

With regard to claims 13 and 27, Page discloses the plastic mass as a gypsum plaster (column 2, lines 24-38).

With regard to claim 14, Page discloses a process line for performing the method of manufacturing the wallboard with beveled edges as discussed above, comprising forming rollers, means for introducing support members upstream of the forming rollers. It is inherent the support members are at least as long as the bottom cover sheet in order to provide a recessed section across the entirety of the wallboard.

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With regard to claim 15, Figure 1 shows the support members introduced upstream of the pouring zone.

With regard to claim 26, Figure 1 shows a means for covering the plastic mass with a top cover sheet.

8. Claims 1, 3, 7, 8, 12, 14, 16, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Camp [US2537509].

Camp discloses a process for making recessed end wallboard. The process of Camp comprises discharging a slurry (16) from a spout (18) onto a face liner (10), rolls (22) or plate (34) can be considered a die for forming the wallboard, the slurry sets as it passes over the machine belt, the hardened board (25) is then cut using cutting means (44) (column 3, line 22-column 4, line 41). Figure 1 show the introduction of a slat (14) from a magazine (12) beneath the face liner. It is inherent the slat is at least as long as the face liner in order to produce a recess across the entire length of the wallboard. Camp also discloses withdrawing the slat after the slurry is set. Figure 1 shows cutting the wallboard at the recessed portion.

With regard to claim 3, Figure 1 shows sequentially a pouring section (18), a slat introduction section (12), and a die (34).

With regard to claim 7, Figure 1 shows removing the slat before cutting the wallboard.

With regard to claim 8, Figures 2 and 3 show the wallboard cut in the center of the recessed portion.

With regard to claim 12, Figure 1 shows covering the slurry with a second face liner (20).

With regard to claims 13 and 27, Camp discloses cementitious slurry used to make a wallboard or gypsum board.

With regard to claim 14, Camp shows in Figure 1 a process line for performing the method of manufacturing the wallboard with recessed edges as discussed above, comprising forming rollers or a plate, means for introducing slats upstream of the forming rollers. It is inherent the support members are at least as long as the facing liner in order to provide a recessed section across the entirety of the wallboard.

With regard to claim 16, Figure 1 shows the slats introduced downstream of the pouring zone.

With regard to claim 26, Figure 1 shows a means for covering the slurry with a second face liner (20).

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 4, 9, 10, 17 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Page [US2168803].

Page discloses a method of manufacturing wallboard with beveled edges. The applicant is referred to paragraph 7 above for a detailed discussion of Page.

With regard to claims 4 and 17, Page discloses applying the support members to the bottom of the bottom cover sheet using any desirable manner (column 3, lines 1-17). Page explicitly discloses preferably using staples. However, it would have been obvious to one of ordinary skill in the art the time of invention to recognize using a glue or adhesive as a functional alternative to staples for securing a member to a sheet and to include a means of applying the adhesive. Furthermore using adhesive would provide the benefit of not producing holes or puncture marks in the bottom cover sheet.

With regard to claims 9, 10 and 33, Page discloses that it is known to vary the shape of the recessed edge of the wallboard by varying the shape of the support members. One of ordinary skill in the art would have found it obvious to vary the thickness and width of the support member in order to optimize the recessed section of the wallboard.

11. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Page in view of Watras [US2001/0044016].

Page discloses a method of manufacturing wallboard with beveled edges. The applicant is referred to paragraph 7 above for a detailed discussion of Page. Page discloses providing recess that transverse the width the wallboard. Page does not disclose providing recessed edges on the longitudinal sides of the wallboard by providing lateral strips on the conveyor belt.

Watras discloses a method for forming a gypsum board with four recessed edges. Watras discloses using a conveyor belt (131) with continuous strips of tape (135)

in the longitudinal direction along both edges of the belt, as shown in Figure 1, to form recessed longitudinal edges of the board.

It would have been obvious to one of ordinary skill in the art a the time of invention to modify the process of Page by including lateral strips on the longitudinal strips of the conveyer belt as taught by Watras in order to form recessed sections on the longitudinal edges of the wallboard.

12. Claim 9,10 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp [US2537509].

Camp discloses a method of manufacturing wallboard with recessed edges. The applicant is referred to paragraph 8 above for a detailed discussion of Camp.

With regard to claims 9, 10 and 33, Camp discloses that it is known to vary the contour of the slat in order to change the contour of the recessed section. One of ordinary skill in the art would have found it obvious to vary the thickness and width of the support member in order to optimize the recessed section of the wallboard.

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camp in view of Watras [US2001/0044016].

Camp discloses a process for making recessed end wallboard. The applicant is referred to paragraph 8 above for a detailed discussion of Camp. Camp discloses providing recess that transverse the width the wallboard. Camp does not disclose providing recessed edges on the longitudinal sides of the wallboard by providing lateral strips on the conveyor belt.

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Watras discloses a method for forming a gypsum board with four recessed edges. Watras discloses using a conveyor belt (131) with continuous strips of tape (135) in the longitudinal direction along both edges of the belt, as shown in Figure 1, to form recessed longitudinal edges of the board.

It would have been obvious to one of ordinary skill in the art a the time of invention to modify the process of Camp by including lateral strips on the longitudinal strips of the conveyer belt as taught by Watras in order to form recessed sections on the longitudinal edges of the wallboard.

Allowable Subject Matter

- 14. Claims 28 –30 are allowed.
- 15. Claims 18, 19, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 16. Claims 5, 6, 24, 25, 31 and 32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 17. The following is an examiner's statement of reasons for allowance: Claims 5, 18, 23 and 30 require accelerating or a means for accelerating the lath up to the speed of the facing material. Claims 6, 19, 23, and 30 require accompanying or a means for accompanying the lath into the die. Claim 28 discloses moving the lath in a direction parallel to its length and moving the lath in a direction parallel to its width and coating

the lath with glue. The prior art of record does not disclose the above process steps or the means for performing the process steps.

The process and apparatus of Barcaro does not include a means for accelerating the laths. Barcaro discloses jacks to push the laths along a path that moves the lath in direction parallel to the lath's width and length, however Barcaro does not disclose a glue applying apparatus along the laths path of movement.

The process and apparatus of Camp does not disclose an accelerating and accompanying means. Camp shows vertically moving the slats into a position to introduce the slats under the liner. It is not obvious to modify the slat-dispensing device by changing the direction of the slats' movement.

The process and apparatus of Page does not disclose a means for accelerating and accompanying the support member. Page shows vertically introducing the support member to the bottom of the liner. It is not obvious to modify the support member-dispensing device by changing the direction of the support member's movement.

18. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel McNally whose telephone number is (571) 272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, pall-800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel/McMally

Examiner

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JEFF H. AFTERGUT PRIMARY EXAMINER GROUP 1300

dpm May 16, 2007